

# United States Patent and Trademark Office



APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO
09/578,215	05/23/2000	Edward B. Boden	END9 1999 0129 US1	4856
7590 04/29/2005 ·		EXAMINER		
IBM Corporation			SON, LINH L D	
Dept. 917				
3605 Highway 52 North			ART UNIT	PAPER NUMBER
Rochester, MN 55901-7829			2135	
		DATE MAIL ED: 04/20/2005		

Please find below and/or attached an Office communication concerning this application or proceeding.

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	Application No.	Applicant(s)				
	09/578,215	BODEN ET AL.				
Office Action Summary	Examiner	Art Unit				
	Linh LD Son	2135				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).						
Status						
1) Responsive to communication(s) filed on 08 Ap	<u>oril 2005</u> .					
2a) ☐ This action is <b>FINAL</b> . 2b) ☑ This	This action is FINAL. 2b)⊠ This action is non-final.					
3) Since this application is in condition for allowar	Since this application is in condition for allowance except for formal matters, prosecution as to the ments is					
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims						
4) Claim(s) 1-22 is/are pending in the application.						
4a) Of the above claim(s) is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.						
6)⊠ Claim(s) <u>1-22</u> is/are rejected.	· <u> </u>					
7) Claim(s) is/are objected to.						
8) Claim(s) are subject to restriction and/or election requirement.						
Application Papers						
9)☐ The specification is objected to by the Examine	г.					
10) The drawing(s) filed on is/are: a) acce	epted or b) objected to by the E	Examiner.				
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of:						
1. Certified copies of the priority documents have been received.						
2. Certified copies of the priority documents have been received in Application No						
3. Copies of the certified copies of the priority documents have been received in this National Stage						
application from the International Bureau (PCT Rule 17.2(a)).						
* See the attached detailed Office action for a list of the certified copies not received.						
Attachment(s)						
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)	4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date					
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date		atent Application (PTO-152)				

Application/Control Number: 09/578,215 Page 2

Art Unit: 2135

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#### **DETAILED ACTION**

- 1. This detail action is a non-final action and response to the amendment received on 04/08/05. Since this amendment is not entered due to the new found art, which is pertinent to the claims, the pending claims are 1-22. The office regrets any inconvenience due to the applicant.
- 2. The indicated allowability of claims 8-11 and 17 is withdrawn in view of the newly discovered reference(s) to Allied Telesyn. Rejections based on the newly cited reference(s) follow: Allied Telesyn, NAT, GRE and Security Associations, May 1998, page 1-4.

# Claim Rejections - 35 USC § 101

- 3. 35 U.S.C. 101 reads as follows:
  - Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.
- 4. Claims 8, 9, 10, 11, 12, 16, 17, and 21 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The language still recites the program steps without being implemented by a program or software instruction in a computer medium hardware. Therefore, the 35 U.S.C.101 traversal is not persuasive and the rejection is maintained.

Application/Control Number: 09/578,215 Page 3

Art Unit: 2135

### Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 6. Claims 1, 12, 13, 16, 18, 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Borella et al (US-6353614), hereinafter "Borella", in view of Jain et al (US-6047325), hereinafter "Jain"
- As per claims 1, 12, 13-16, 18, 19, 20 and 22, the previous office action rejection basis is maintained. Further, the implementation of NAT with VPN connection has also been considered in Borella invention (Col 16 lines 20-23). For more, Jain teaches the VPN connection setup utilizing the DHCP servers to assign IP address (Col 5 lines 13-39). Therefore, it would be obvious at the time of the invention was made for one having ordinary skill in the art to incorporate Borella's Network Address Translation method with Jain's VPN connection method to provide a secure connection over the Internet or Intranet. Since, Borella anticipated the implementation of NAT with VPN, the incorporating NAT with VPN would provide a double layers of security to the user. Further, Jain's invention utilizes DHCP servers. The incorporation of NAT in Jain's DHCP server would allow the VPN connection to be executed on one end of the connection (Borella, Col 16 lines 20-23, and Jain (Col 5 lines 13-40).

Art Unit: 2135

- 8. As per claims 14 and 15, Claim 1 rejection basis is incorporated. Further, Borella does teach the implementation of NAT with VPN in (Col 16 lines 20-23). Therefore, the ICMP layer (Col 5 lines 5-14 and FTP (Col 2 lines 22-28) implementation in NAT can also be implemented in the VPN NAT environment.
- 9. Claims 2-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Borella et al (US-6353614) in view of Jain et al (US-6047325), and further in view of Arrow (US-6226751).
- 10. As per claims 2-7, the previous written action rejection basis is maintained and further is incorporated the obviousness rejection of claim 1. Claims 2-7 are rejected.
- 11. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Arrow (US-6226751).
- 12. As per claim 11, Arrow discloses method of providing customer tracking of VPN NAT activities (Col 10 lines 17-20) as they occur in an operating system kernel (Col 9 lines 35-40 and Col 10 lines 32-43). However, Arrow does not directly disclose the steps of: responsive to VPN connection configuration, generating journal records', updating said journal', records with new records for each datagram processed through a VPN connection', and enabling a customer to manage said journal records. Nevertheless, Col 10 lines 17-20 teach the use of the Simple Network Management Protocol to get the

Application/Control Number: 09/578,215

Art Unit: 2135

traffic statistics. It is obvious at the time of the invention was made for one of ordinary skill in the art to recognize that the same protocol includes the claim feature completely.

#### Claim Rejections - 35 USC § 103

- 13. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 14. Claims 8-11, and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Allied Telesyn, NAT, GRE, and Security Associations, May 1998, Page 1-5, hereinafter "AT"
- 15. As per claims 8 and 17, AT discloses "A method for allowing the definition and configuration of NAT directly with definition and configuration of Ipsec-based VPN connections and VPN policy, comprising the steps executed by a digital processor at one end of a VPN connection" on Page 1, 1<sup>st</sup> paragraph, "of: configurating the requirement for VPN NAT by a yes/no decision in a policy for each of the three types of VPN NAT" on Page 2 (configuring the encryption key for VPN connection), and Page 3 #5, and "configuring a remote IP address pool or a server IP address pool selectively responsive to said yes/no decision for each said VPN NAT type" on Page 3 #12-13. However, AT does not explain clearly the said three types being VPN NAT type a outbound source IP NAT, VPN NAT type c inbound source IP NAT, and VPN NAT type

Application/Control Number: 09/578,215

Art Unit: 2135

d inbound destination IP NAT. Nevertheless, It would be obvious at the time of the invention was made for one having ordinary skill in the art to realize that the configuration script for either Router A on page 3 and Router B on page 4 does teach the three types VPN NAT claimed since one end of the connection has NAT association with security policy set and further the outbound destination is a network address translation (NAT) destination (Page 3-4 # 15-16, and Page 5 #15-16. "The type a outbound source IP NAT, VPN NAT type c inbound source IP NAT" is implied on page 3-4 #10-16, and Page 4-5 #10-16, and "VPN NAT type d inbound destination IP NAT" is implied on page 3-4 lines 10-16. In addition, AT is silent on the policy database for each type of VPN NAT. Nevertheless, AT does disclose a method to enable GRE for the both LAN connections on page 3 #7-8, and Page 4 #7-8 for the inbound and outbound connection security policies. Therefore, it would have been obvious at the time of the invention was made for one having ordinary skill in the art to realize that the policy database must exist, because the configuration scripts does not restrict to only one LAN VPN connection. Thus, a multiple LAN VPN connection will require multiple scripts policy database to configure for each connection.

Page 6

16. As per claim 9-10, AT discloses "the method of claim 8, further comprising the step of configuring a unique said remote IP address pool for each remote address to which a VPN connection will be required, whereby said remote IP address pool is keyed by a remote ID" on page 3 #12-13, and #7.

Art Unit: 2135

17. As per claim 11, AT discloses "A method of providing customer tracking of VPN NAT activities as they occur in an operating system kernel, comprising the steps executed at one end of a VPN connection of: responsive to VPN connection configuration, generating journal records; updating said journal records with new records for each datagram processed through a VPN connection; and enabling a customer to manage said journal records" on Page 3 #11.

# **Conclusion**

- Any inquiry concerning this communication from the examiner should be directed to Linh Son whose telephone number is (571)-271-3856.
- 2. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor Kim Y. Vu can be reached at (571)-272-3859. The fax numbers for this group are (703)-872-9306 (official fax). Any inquiry of general nature or relating to the status of this application or proceeding should be directed to the group receptionist whose telephone number is (571)-272-2100.
- 3. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval IPAIR.I system. Status information for published applications may be obtained from either Private PMR or Public PMR. Status information for unpublished applications is available through Private PMR only. For more information about the PAIR system, see http://pzr-

Application/Control Number: 09/578,215

Art Unit: 2135

direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Linh LD Son

**Patent Examiner** 

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Page 8

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